

ABSTRACT

In a motor control device according to the invention, upon velocity control of a motor, a superimposed signal generating unit 9 outputs a superimposed signal id_h of a repetitive waveform, such as a triangular wave or a sine wave. A d-axis current command generating unit 10 adds the superimposed signal id_h generated by the superimposed signal generating unit 9d to a d-axis current command id_c^* and outputs a d-axis current command id_c^* . An axial misalignment detecting unit 11 (11a, 11b, 11c, and 11d) receives the d-axis current command id_c^* and a q-axis current command i_q^* and outputs an axial misalignment angle estimation value $\Delta\theta^*$. An axial misalignment correction unit 12 receives the axial misalignment angle estimation value $\Delta\theta^*$ and an actual detected position θ_m and outputs a position after correction θ_m' . Therefore, detection and correction can be performed in real time through calculation at a given timing during a normal operation.